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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/708,609	03/15/2004	Rusty Stewart Ashby SR.	018300.001681	2608
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MOORE & VAN ALLEN PLLC P.O. BOX 13706 Research Triangle Park, NC 27709			EXAMINER OKEZIE, ESTHER O	
			ART UNIT	PAPER NUMBER
			3654	

DATE MAILED: 10/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/708,609

Applicant(s)

ASHBY, RUSTY STEWART

Examiner

Esther O. Okezie

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 18-26 is/are allowed.
- 6) ☒ Claim(s) 1-6, 17, 27 and 29 is/are rejected.
- 7) ☒ Claim(s) 7-16 and 28 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/16/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-4, 27,29 are rejected under 35 U.S.C. 102(b) as being anticipated by Willis.
2. Re claim 1, Willis discloses a frame (100) disposable on an article to be lifted (drill pipe 30) and including at least two fulcrums (85) distributed generally symmetrically around the frame; at least two lifting arms (70) each pivotally mounted to a corresponding fulcrum, each lifting arm having a lower end (74) extending lower than the fulcrum and an upper end (84) extending above the fulcrum; and a central exertion member (cam body 50) including a top surface having one sloped portion (58) for each lifting arm, the top surface of each sloped portion being downwardly inclined from the center of the exertion member and below the upper ends of the respective lifting arms to apply force (see upward arrow on power swivel 20 in fig 2) to the upper ends of the lifting arms upon application of upward force to the exertion member.
3. Re claim 2, wherein the lower end of each lifting arm is adapted not to contact the article in a retracted position (fig 10) and to contact the article in an engaged position (fig 2), and wherein upon application of upward force (see upward arrow on

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power swivel 20 in fig 2) the exertion member the lifting arms rotate around the corresponding fulcrum from the retracted position to the engaged position (fig 2).

4. Re claim 3, wherein the exertion member engages the upper ends of the lifting arms in a manner selected from the group consisting of sliding engagement and rolling engagement (see abstract).

5. Re claim 4, wherein the at least two lifting arms (70) each comprise an approximately vertical portion (80) outside of the frame mounted to an approximately horizontal portion (84) extending outward from the exertion member to the upper end of the respective vertical portions.

6. Re claim 27, Willis discloses a method of making a lifting apparatus comprising; assembling a frame disposable on an article to be lifted and including at least two fulcrums distributed generally symmetrically around the frame; pivotally mounting a lifting arm to each fulcrum, each lifting arm having a lower end extending lower than the fulcrum and an upper end extending above the fulcrum, wherein the lower end of each lifting arm is adapted not to contact the article in a retracted position and to contact the article in an engaged position; providing a central exertion member including a top surface having one sloped portion for each lifting arm, the top surface inclined from of each sloped portion being downwardly in the center of the exertion member and below the upper ends of the respective lifting arms to apply force to the upper ends of the lifting arms upon application of upward force to the exertion member to rotate each lifting arm around the corresponding fulcrum from the retracted position to the engaged position (see figs 1-9)

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Re claim 29, Willis discloses a method of lifting an article comprising: providing a lifting apparatus (10) disposable on an article (30) to be lifted, the; lifting apparatus including: a frame (100) including at least two fulcrums (85) distributed generally symmetrically around the frame; first load bearing means (20) mounted to the frame at least two lifting arms each pivotally mounted to a corresponding fulcrum, each lifting arm having a lower end extending lower than the fulcrum and an upper end extending above the fulcrum, wherein the lower end of each lifting arm is adapted not to contact the article in a retracted position and to contact the article in an engaged position; a central exertion member (50) including a top surface including one sloped portion (58) for each lifting arm, the top surface of each sloped portion being downwardly inclined from the center of the exertion member and below the upper ends of the respective lifting arms to apply force to the upper ends of the lifting arms upon application of upward force (fig 2) to the exertion member; and second load bearing means (piston 124) mounted to the exertion member; applying upward force to the first load bearing means to lift the lifting apparatus; placing the lifting apparatus into position on the article; releasing the first load bearing means; applying upward force to the second load bearing means to cause the exertion member to apply force to the upper ends of the lifting arms to cause each lifting arm to rotate around the corresponding fulcrum from the retracted position to the engaged position; and applying increased upward force to the second load bearing means to lift the lifting apparatus and the article (see figs 2 and 10).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 5, 6, and 17 rejected under 35 U.S.C. 103(a) as being unpatentable over Lighthipe, Jr. et al in view of Willis.

8. Re claim 1, Lighthipe Jr. et al discloses a lifting apparatus comprising a frame (11) disposable on an article to be lifted (16) and including at least two fulcrums (14) distributed generally symmetrically around the frame; at least two lifting arms (13) each pivotally mounted to a corresponding fulcrum, each lifting arm having a lower end (15) extending lower than the fulcrum and an upper end (28) extending above the fulcrum; and a central exertion member (sliding cross bar 21) which upon application of upward force, the exertion member applies force to the upper ends of the lifting arms (see fig. 2).

Lighthipe Jr. et al does not disclose the central exertion member including a top surface having one sloped portion for each lifting arm, the top surface of each sloped portion being downwardly inclined from the center of the exertion member and below the upper ends of the respective lifting arms. Willis discloses a cam body (50) with sloped portions (58) for cammed movement of the legs (70) during lifting operations. It would have been obvious to one of ordinary skill in the art to modify the sliding cross bar (21) of Lighthipe Jr. et al to include downwardly cammed surfaces for automatic movement of the legs (13) into closing engagement with the object to be lifted as taught

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by Willis. Cam surfaces are well known in the art for transferring motion from one direction to another.

9. Re claims 5 and 6, Lighthipe Jr. et al discloses a first load bearing means mounted to the frame and adapted to receive the lifting means. The load bearing means including at least two vertical members (19) mounted to the frame (11) at their lower ends and on opposite sides of the frame; a horizontal member (21) mounted to the upper ends of vertical members; and a lifting eye (24).

10. Re claim 17, Lighthipe Jr. et al discloses the lifting apparatus of claim 1, further comprising guide members (brackets 15) mounted to the frame for aligning the frame on the article.

Allowable Subject Matter

11. Re claims 18-26 are allowed.

12. Re claims 7-16, 28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Esther O. Okezie whose telephone number is (571) 272-8108. The examiner can normally be reached on Mon-Thurs 8-6:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Katherine A. Matecki can be reached on (571) 272-6951. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EOO

A handwritten signature in black ink that reads "Kathy Matecki". The signature is written in a cursive, flowing style.

KATHY MATECKI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600